

State of Kansas

Kansas Department of Health and Environment
Notice Concerning Proposed Kansas Air Quality
Construction Permit and Public Hearing

Notice is hereby given that the Kansas Department of Health and Environment (KDHE) is soliciting comments regarding a proposed air quality construction permit. Abengoa Bioenergy Biomass of Kansas, LLC (ABBK) located at 16150 Main Circle Drive, Suite 200, Chesterfield, MO 63017 has applied for an air quality construction permit in accordance with the provisions of K.A.R. 28-19-300 to append ABBK's September 16, 2011 permit by installing four emergency generator engines in Section 18, Township 33 South, Range 37 West, Stevens County, Kansas, near Hugoton, Kansas. Emission of particulate matter (PM), PM equal to or less than 10 microns in diameter (PM₁₀), PM equal to or less than 2.5 microns in diameter (PM_{2.5}), volatile organic compounds (VOCs), oxides of nitrogen (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), hazardous air pollutants (HAPs) and greenhouse gases (GHGs) were evaluated during the permit review process.

The proposed permit is to be issued in accordance with the provisions of K.A.R. 28-19-350, *Prevention of Significant Deterioration* (PSD) which adopts the federal standards, procedures and requirements of 40 CFR 52.21 by reference. These air quality regulations apply to major stationary emission sources located in areas designated as "attainment" under the federal Clean Air Act (CAA). Attainment areas are areas where the air quality meets or is better than the national ambient air quality standards (NAAQS). The proposed permit is appending the September 16, 2011 PSD permit for a biomass to ethanol and biomass-to-energy production facility issued to ABBK. The proposed permit will include four (4) natural gas fired spark ignition emergency engines, connected to corresponding electrical power generators, to support the steam turbine generator and auxiliary utility support systems during boiler start-up, shutdown and malfunction events. The emergency power generators will produce electrical power for critical equipment when biomass-fired boiler power operation is interrupted.

The PSD regulations require evaluation of emission reduction techniques to identify the best available control technology (BACT) for each regulated pollutant, including greenhouse gases (GHGs), for which the emission rate exceeds the PSD significant level. The purpose of BACT is to affect the maximum degree of reduction achievable, taking into account energy, environmental and economic impacts for each regulated pollutant under review. Evaluation of the estimated emissions for the September 16, 2011 ABBK project indicated that the emission rate of oxides of nitrogen, sulfur dioxide, carbon monoxide, particulate matter, and GHGs all exceeded the significance levels and ABBK conducted the required BACT analyses. Since the proposed permit is appending the September 16, 2011 permit, ABBK also conducted the required BACT analyses for the four emergency power generators. The department has reviewed ABBK's BACT analyses and concurs with its findings that for the four emergency power generators, installing low-emission design lean-burn engines, following good combustion practices and firing pipeline quality natural gas is BACT for NO_x, SO₂, CO, PM, PM₁₀ and PM_{2.5}. Installing low-emission, energy efficient design lean-burn engines, following good combustion practices and firing pipeline quality natural gas is BACT for GHGs.

An ambient impact analysis was performed on the potential air emissions of SO₂, PM₁₀, PM_{2.5}, and CO from this proposed project changes.

- The SO₂ screening modeling demonstrated no significant impact on the 3-hour NAAQS. Detailed modeling for SO₂ demonstrated that the emissions from the planned source will not cause or contribute to any violation of the 24-hour NAAQS and that 12.22% of the 24-hour Class II maximum allowable increments for SO₂ are expected to be consumed.
- Detailed modeling for PM₁₀ demonstrated that the emissions will not cause or contribute to any violation of the 24-hour NAAQS and that 96.27% of the 24-hour PM₁₀ Class II maximum allowable increments for PM₁₀ are expected to be consumed.

- Detailed modeling for PM_{2.5} demonstrated that the emissions will not cause or contribute to any violation of the 24-hour PM_{2.5} NAAQS and that 96.56% of the 24-hour PM_{2.5} Class II maximum allowable increment for PM_{2.5} is expected to be consumed.
- The CO screening modeling analysis demonstrated no significant impact on the 1- hour or 8-hour NAAQS. EPA has not established any Class II maximum allowable increments for CO. Accordingly, no calculation of the potential consumption of such increment is possible.
- The proposed project change is not expected to have an impact on the visibility analyses for Cimarron National Grasslands and Hugoton Municipal Airport, or the soil and vegetation analysis already conducted for the September 16, 2011 permit. Any federal land manager who has reason to believe they may have a class I area adversely impacted by the emissions from the proposed project has the opportunity to present KDHE with a demonstration of the adverse impact on the air quality-related values of the federal class I area during the comment period.

A public comment period has been established to allow citizens the opportunity to express any concerns they may have about this proposed permitting action. The public comment period is to begin on December 20, 2012, and will end on January 22, 2013 at noon. All comments should be submitted in writing to Terry T. Tavener, Bureau of Air, 1000 SW Jackson, Suite 310, Topeka, KS 66612-1366.

Any member of the public may request to hold a public hearing to provide comments on the proposed issuance of the draft air quality construction permit. A written request to hold a public hearing should be sent to the attention of Terry Tavener at the address listed above or by FAX to (785) 291-3953 and must be received by noon on January 22, 2013. *If a pertinent request is received, a public hearing is tentatively scheduled by the Kansas Department of Health and Environment (KDHE), on Wednesday, January 23, 2013, beginning at 5:00 p.m. and continuing until audience members have an opportunity to submit comments. The hearing is tentatively scheduled to be held at the Stevens County Memorial Hall located at 200 E 6th Street, Hugoton,*

Kansas 67951. If no pertinent requests to hold the public hearing are received by noon January 22, 2013, the public hearing will be cancelled. A notice of the cancellation will be posted at the KDHE website at <http://www.kdheks.gov/bar/publicnotice.html>

If a hearing is conducted, all interested parties will be given a reasonable opportunity to present their views orally or by submission of written materials during the hearing. In order to give all parties an opportunity to present their views, it may be necessary to limit oral presentations to a specific time limit. Any individual with a disability may request accommodation in order to participate in the public hearing and may request the proposed materials in an accessible format. Requests for accommodation must be made no later than Friday, January 11, 2013 by contacting *the Bureau of Air* at (785) 296-0297.

A copy of the proposed permit, permit application, all supporting documentation, and all information relied upon during the permit application review process for the PSD permit are available for public review for a period of 30 days from the date of publication during normal business hours (8:00 AM to 5:00 PM) at the KDHE, Bureau of Air (BOA), 1000 SW Jackson, Suite 310, Topeka, KS 66612-1366. A copy of the proposed permit and all supporting documentation can also be reviewed at the KDHE Southwest District Office, 302 West McArtor Road, Dodge City, KS 67801-6014. To obtain or review the proposed permit and supporting documentation, contact Terry Tavener, (785) 296-1581, at the KDHE central office, or the KDHE Southwest District Office, (620) 225-0596. The standard departmental cost will be assessed for any copies requested. These same materials are available, free of charge, at the KDHE Bureau of Air website, <http://www.kdheks.gov/bar/index.html>.

Robert Moser, MD, Secretary

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